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FACT SHEET

FINAL AIR TOXIC RULE FOR ACETAL RESIN, ACRYLIC AND MODACRYLIC FIBER, HYDROGEN FLUORIDE, AND POLYCARBONATE PRODUCTION (GENERIC MACT RULE)

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is today issuing final regulations to reduce emissions of air toxics from four different manufacturing processes: acetal resin, acrylic and modacrylic fiber, hydrogen fluoride, and polycarbonate production. Air toxics, also referred to as hazardous air pollutants, are those pollutants known or suspected of causing cancer and/or other serious health effects.
- ! EPA developed today's rule in close partnership with major stakeholders including industry representatives and representatives of those States with affected production facilities.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

Acetal Resin Production

- ! There are only two major facilities in the nation that manufacture acetal resins which already have controls in place which reflect the level of control required for this source category. This action is designed to ensure continued well controlled operations and consequently is not expected to significantly reduce air toxic emissions from the manufacture of acetal resins.

Acrylic And Modacrylic Fiber Production

- ! The final requirements only apply to three currently operating, major facilities which already have controls in place which reflect the level of control required for this source category. This action is designed to ensure continued well controlled operations and consequently is not expected to reduce air toxic emissions from the manufacture of acrylic and modacrylic fiber production.

Hydrogen Fluoride Production

- ! The EPA's final standards will only apply to one major facility which already has control requirements in place that reflect the level of control required for this source category. This action is designed to ensure continued well controlled operations and consequently is not expected to significantly reduce air toxic emissions from the manufacture of hydrogen fluoride.

Polycarbonate Production

- ! There are four major facilities presently operating that will be affected by this final rule. Most of the producers of polycarbonates have already installed emission control or recovery equipment. Today's final rule will maintain the emissions reductions of a number of air toxics including methylene chloride, ethyl chloride, and phosgene.

BACKGROUND

- ! Under the Clean Air Act, EPA is required to regulate sources of 188 listed air toxics. (Note that this list originally contained 189 pollutants, but EPA has subsequently removed the chemical caprolactum from the list.) On July 16, 1992, EPA published a list of industry groups (known as source categories) that emit one or more of these air toxics. For listed categories of "major" sources (those that emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of a listed pollutant), the Clean Air Act requires EPA to develop standards that require the application of maximum achievable control technology (MACT) to control emissions.

WHAT ARE THE PRODUCTION PROCESSES AFFECTED BY THE FINAL RULE?

Acetal Resin Production

- ! Acetal resins are thermoplastics used in industrial applications, plumbing and irrigation, automotive plastic parts, consumer articles, appliances, and other plastic parts. The primary pollutants emitted from acetal resin production are formaldehyde and methanol.

Acrylic And Modacrylic Fiber Production

- ! Acrylic and modacrylic fibers are synthetic fibers composed of acrylonitrile and lesser fractions of copolymers. These fibers are used in two main industries : as a substitute for wool fibers in the textile industry manufacturing carpet, socks, sweaters, etc.; and as a carbon fiber precursor for the sporting goods industry (tennis rackets, golf clubs, etc.) and the aviation industry.

Hydrogen Fluoride Production

- ! Hydrogen fluoride production is the production and recovery of hydrogen fluoride by reacting calcium fluoride with sulfuric acid. The final rule does not cover processes that produce gaseous hydrogen fluoride for direct reaction with hydrated aluminum to form aluminum fluoride because hydrogen fluoride is not recovered

as an intermediate or final product prior to reacting with the hydrated aluminum. Hydrogen fluoride is used in the production of chlorofluorocarbons and hydrochlorofluorocarbons, as well as in the hydrogen fluoride alkylation process at refineries and the production of aluminum fluoride.

Polycarbonate Production

- ! Polycarbonates are produced mainly by reacting bisphenol with phosgene. Methylene chloride is the solvent typically used in the process. Polycarbonates have a variety of uses, including compact disks, automotive parts, and electrical components.

WHAT DOES THE EPA'S RULE REQUIRE FROM EACH OF THESE PRODUCTION PROCESSES?

Acetal Resin Production

- ! EPA's final rule establishes control efficiency requirements for the following phases of the manufacturing process: storage vessels, process vents, and equipment leaks.

Acrylic And Modacrylic Fiber Production

- ! The production of acrylic and modacrylic fiber involves polymerization reaction processes, wet or dry solvent spinning, solvent recovery, and fiber processing (such as washing, stretching, crimping, drying). EPA's final rule establishes either emission limits or control efficiency requirements for the following phases of the manufacturing process: storage vessels, process vents, and equipment leaks.

Hydrogen Fluoride Production

- ! EPA's final rule establishes control requirements for the following sources of hydrogen fluoride emissions at the production facilities: process vents on recovery and refining equipment, storage vessels, bulk loading of tank trucks and tank rail cars, and leaks from handling equipment.

Polycarbonate Production

- ! EPA's final rule establishes control requirements for the following emissions points at affected sources: storage vessels, process vents, and equipment leaks.

HOW MUCH WILL THE FINAL RULE COST?

- ! The estimated combined cost for the 10 affected facilities within the four

industries is less than \$300,000 per year.

FOR FURTHER INFORMATION

- ! Interested parties can download the final rule from EPA's web site on the Internet under "recent actions" at the following address: (<http://www.epa.gov/ttn/oarpg>). For further information about the final requirements, contact the following persons at EPA's Office of Air Quality Planning and Standards: for the acetal resins source category, contact Mr. John M. Schaefer at (919) 541-0296; for the acrylic and modacrylic fiber source category, contact Mr. Anthony P. Wayne at (919) 541-5439; for the hydrogen fluoride source category, contact Mr. Rick Colyer at (919) 541-5262; for the polycarbonate source category, contact Mr. Mark Morris at (919) 541-5416.
- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (<http://www.epa.gov/oar/>).